IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-15 (canceled)

16. (new) A valve seat for a cylinder head of an internal combustion engine, which includes an additional material fused to the base material of the cylinder head, which additional material includes at least an inner layer (6) facing the cylinder head (1) and an adjacent outer layer (7) more remote from the cylinder head (1), the inner layer (6) including copper or a copper alloy and having good joining properties with respect to the base material of the cylinder head (1), and the outer layer (7) including an alloy comprising nickel, iron and/or cobalt as its main constituent.

17. (new) The valve seat as claimed in claim 16, characterized in that the inner layer (6) has good heat conduction properties.

18. (new) The valve seat as claimed in claim 16, characterized in that the copper alloy of the inner layer (6) includes aluminum as an alloying constituent.

19. (new) The valve seat as claimed in claim 16, wherein the copper alloy of the inner layer (6) includes iron as an alloying constituent.

20. (new) The valve seat as claimed in claim 16, wherein the nickel, iron and/or cobalt alloy of the outer layer (7) includes chromium as an alloying constituent.

21. (new) The valve seat as claimed in claim 16, wherein the nickel, iron and/or cobalt alloy of the outer layer (7) includes silicon as an alloying constituent.

22. (new) The valve seat as claimed in claim 16, wherein the nickel, iron and/or cobalt alloy of the outer layer (7) includes molybdenum as an alloying constituent.

23. (new) A process for producing a valve seat for a cylinder head of an internal combustion engine which includes an additional material fused to the base material of the cylinder head, which additional material includes at least an inner layer (6) facing the cylinder head (1) and an adjacent outer layer (7) more remote from the cylinder head (1), the inner layer (6) including copper or a copper alloy and having good joining properties with respect to the base material of the cylinder head (1), and the outer layer (7) including an alloy comprising nickel, iron and/or cobalt as its main constituent, the process comprising

fusing the inner layer to the cylinder head at the location at which the valve seat is to be formed by the introduction of energy,

after the inner layer has been fused to the base material of the cylinder head, fusing the outer layer to the inner layer by the introduction of energy,

wherein the inner layer (6) is placed onto the cylinder head (1) in the form of a solid ring, and wherein the outer layer (7) is applied to the inner layer (6) in powder form.

24. (new) The process as claimed in claim 23, wherein the additional material is fused to the cylinder head (1) by means of a laser beam (9, 9').

25. (new) The process as claimed in claim 23, wherein the additional material is fused to the cylinder head (1) by means of an electron beam.